

ASEAN: Recent perspectives on regional labour market

Summary

The ASEAN region is identified as the next potential spotlight of economic growth. The region's resilience continues to be tested and has prevailed, rendering it as one of the more stable and thriving economic regions in the world.

Nevertheless, an important area that is bound for change in the years ahead is the ASEAN's labour market dynamics. We employ a well-established theory of the so-called Beveridge curve analysis to perform an empirical study on the bigger and more mature ASEAN economies.

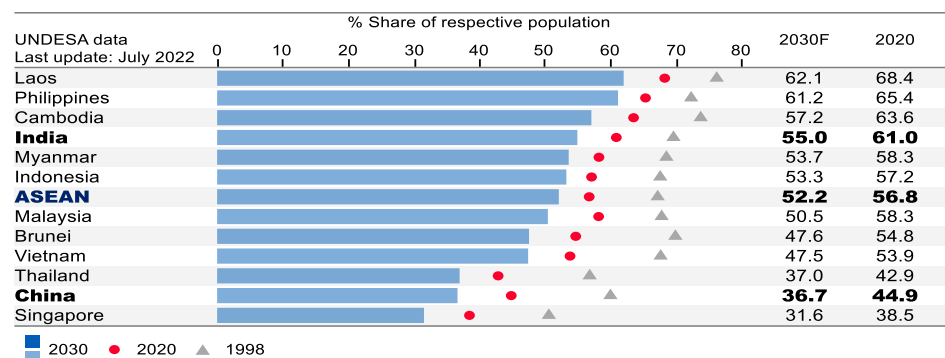
In essence, there are nuances in the degree of skills' mismatches within the larger ASEAN-4 economies. The silver lining is that proactive and contextual government policies are needed to reduce the extent of mismatches and streamline the labour market more effectively. Finally, consistent monitoring and having more comprehensive labour market data will undoubtedly hasten up efforts to create a more dynamic and resilient labour force in our region.

A thriving region with young population and rising middle class

The South-East Asian (ASEAN) region is considered globally as the next potential spotlight for growth. One key factor that underpins this optimism is the comparatively higher proportion of younger population with its rising middle-income class. The latest available estimate suggests that ASEAN population in 2022 stood at more than 673 million, the third largest in the world after China and India, surpassing the United States of America. The economies of ASEAN have shown its resilience during COVID-19 and are currently stable and thriving.

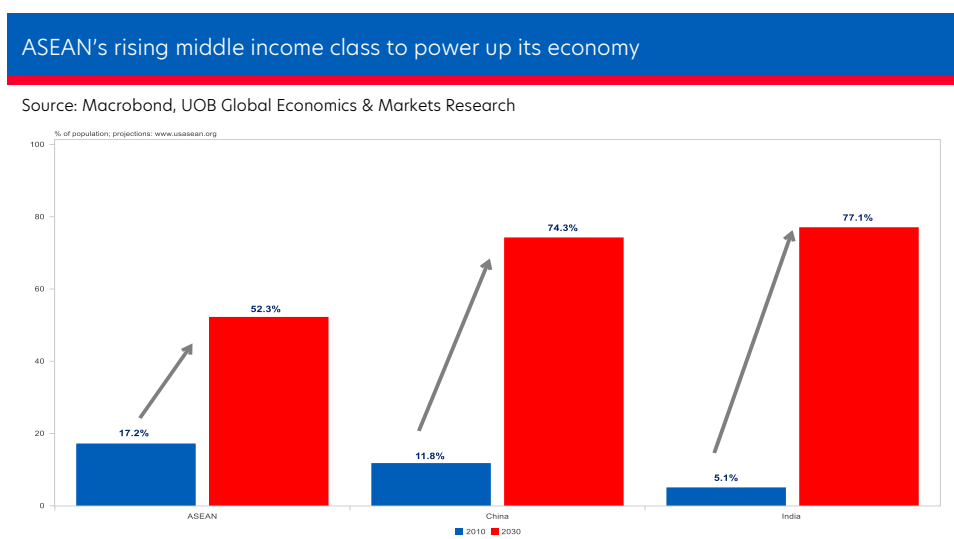
ASEAN's population advantages with more than 50% of young population

Source: Macrobond, UOB Global Economics & Markets Research



Nevertheless, an important area that is bound for change in the years ahead is the ASEAN’s labour market dynamics. This is especially so because the structure and key stronghold sectors within economies of ASEAN are diverse and unique but altogether face challenges such as the rise of adoption of artificial intelligence (AI) and automation to boost productivity levels. Singapore, Malaysia, and Thailand are well known for their competitiveness in manufacturing, while Indonesia remains the commodity powerhouse in ASEAN and together with it, Malaysia. Meanwhile, economies such as Thailand, Malaysia, and Indonesia are also notable players in the agriculture sector.

The rise of AI and other demographic changes, for example, could mark important and significant changes in the region’s labour market dynamics. Hence, understanding the most recent perspectives on the state of ASEAN labour market is key to derive further insights on the near- to medium-term outlook of this region. We employ a well-established theory of the so-called Beveridge curve analysis to perform an empirical study on the bigger and more mature ASEAN economies of Singapore, Thailand, Malaysia, and Indonesia due to data availability. Important findings and policy implications conclude.



Beveridge curve: A tool to analyze mismatch in the job market

The Beveridge curve is developed to analyze and succinctly depicts the relationship between the unemployment and the vacancy rates which typically has negative correlations, i.e., periods of economic expansion resulting in low unemployment usually imply higher vacancy rates and vice versa. For example, during economic slowdown, unemployment rate would likely increase as the vacancy rate drop. However, if the unemployment rate increases significantly while the vacancy rate is largely unchanged, this will render the Beveridge curve to shift rightwards, indicating that there may be a rising skills mismatch problems in the labor market preventing workers from taking up those job vacancies. Meanwhile, changes in the labour force structure will shift the Beveridge curve parallelly outwards which typically happens when both the vacancy and unemployment rates go higher as matching processes are underway. Changes in the participation rate, aging population, and immigration flows would also typically drives the outward move. In contrast, as the skill matching improves, that will shift the Beveridge curve inwards as unemployment and vacancy rates ease together. Having an efficient labour market intermediary or agency or having an effective social insurance or some sort of credible unionization would typically also account for such inward shifts. Job losses, high resignations, and new type of job creations would typically (which could inherently imply some sort of obsolescence in the current skills available in the market) shift the curve outwards.

Singapore: Surge in tech-related labour demand and fall in non-resident employment may have led to an increase in matching inefficiency

Singapore’s Beveridge curve has likely seen an outward shift in the COVID-19 years (2020-2022), signaling a reduction in matching efficiency in the labour market as represented by the shift from the blue ($R^2=0.63$) to the red ($R^2=0.56$) regression line. Furthermore, some degree of normalization in matching efficiency could have taken place in the post-COVID years (from 1Q23 onwards) as represented by the inward shift from the red to the green ($R^2=0.98$) regression line, although we cannot be entirely certain given the paucity of data points ($n=4$).

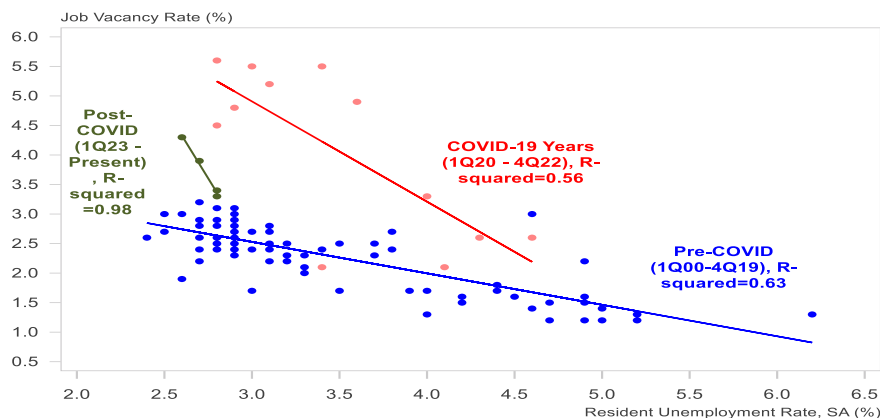
The proliferation of labour demand in new growth areas that are dominated by tech-related skills such as digitalization, big data and artificial intelligence, partially due to accelerated adoption during the COVID-19 pandemic, may have been met with a shortage of supply of workers with the relevant skillsets, contributing to the outward shift in the Beveridge curve in the COVID-19 years (2020-2022).

In addition, the decline in non-resident employment during COVID-19 as workers returned to their home countries led to an acute labour shortage in certain sectors (construction, accommodation and F&B, transport operators) that are traditionally heavily reliant on the foreign workforce where the resident labour force may not be able to effectively absorb the slack emerging from these sectors, translating to a spike in job vacancies and an increase in matching inefficiency. Subsequently, the recovery of non-resident employment back above pre-pandemic (2019) levels in 2023 helped to address labour shortages to some extent in the aforementioned sectors, with the reduction in matching inefficiency resulting in a possible normalization (inward shift) of the Beveridge curve in the post-COVID years (1Q23 - Present).

In the long run, a slew of existing and upcoming pipeline of government policies complemented by support from the private sector could potentially engineer a reduction or at least maintaining the current "degree" of matching inefficiency in the jobs market. For the further details, you may read our report on [Singapore: Labour Market – Beveridge Curve & Matching Inefficiency](#).

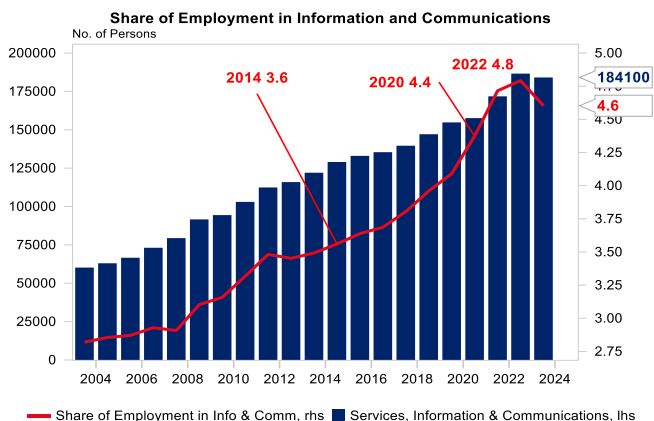
Shifts in Singapore's Beveridge Curve

Source: Macrobond, UOB Global Economics & Markets Research



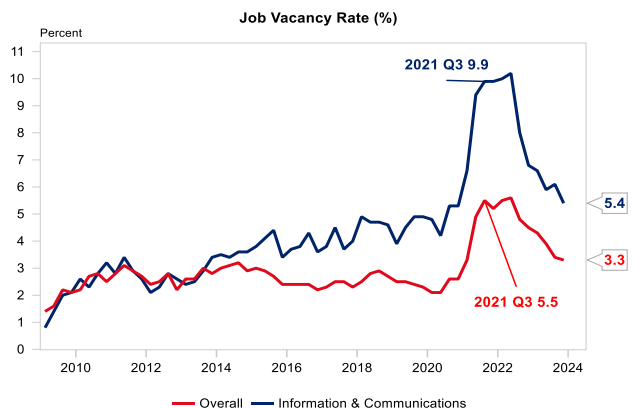
Share of employment in "digital" services accelerated during the COVID-19 years

Source: Macrobond, UOB Global Economics & Markets Research



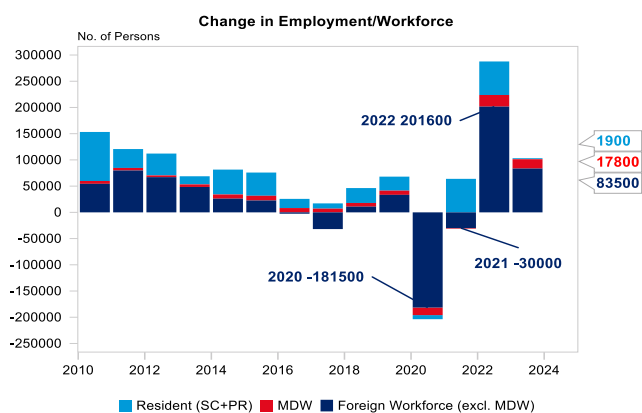
Job vacancy rates in "digital" services are almost twice that of the overall rate in recent quarters

Source: Macrobond, UOB Global Economics & Markets Research



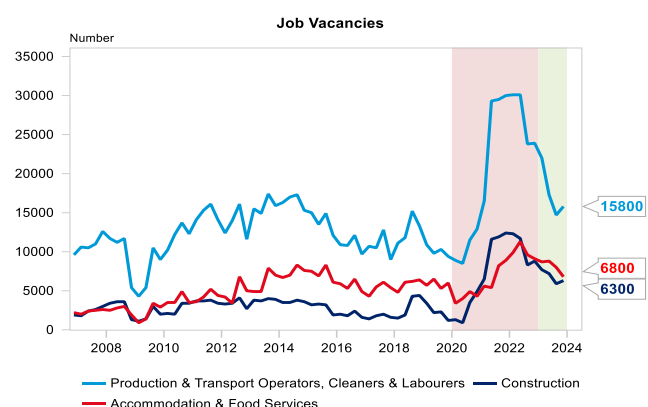
Sharp declines in non-resident employment in 2020/2021

Source: Macrobond, UOB Global Economics & Markets Research



Job vacancies in sectors heavily reliant on the foreign workforce surged in the midst of the pandemic recovery

Source: Macrobond, UOB Global Economics & Markets Research



Thailand: Low unemployment, low job vacancy rate but relatively low wages

Based on data available, our study shows that Thailand's Beveridge curve paints an unconventional picture where the typical downward sloping shape of the Beveridge curve does not apply. For one, Thailand's unemployment rate has been relatively low historically, averaging well below 2% during the pre-pandemic years. This might likely imply that Thailand's labour market has almost always been close to full employment, yet job vacancy rates are extremely low. Except for 3Q2020 where vacancy rates peaked at 1.2% but quickly normalised thereafter. These findings are consistent with a recent study by the Bank of Thailand (BOT)¹ that found the Beveridge curve for the Thai labor market shifted to the right, which reflected the demand-supply mismatches in the Thai labor market due to most job vacancies were for factory workers which do not require high level of education and were previously filled by migrant workers that saw limited inbound movement due to COVID-19-related restrictions while these jobs were not attractive to those currently unemployed.

Thailand's low and stable unemployment figures can be attributed to the heavy reliance on agriculture, which accounts for about 31% of the country's workforce. In the recent two years, Thailand's agriculture industry stands out with the highest wage growth compared to other sectors like manufacturing, professionals, information & communications and finance & insurance. Agriculture industry's relatively stable employment outlook and low barriers to entry may serve as a high opportunity cost for the local population to pursue high income careers in finance and technology, when these industries are perceived to be of high retrenchment risk with a much higher education level required (high barriers to entry). This is especially so during the pandemic where it was estimated that around 1.7mn workers have moved back to their rural hometown and remains reluctant to return to big cities even as the next big employment sector, the tourism sector, has somewhat recovered.

Meanwhile, despite the information and communication sector in Thailand experiencing strong expansion in recent years, the growth remains inconsistent and marred by negative wage growth as well. This is likely due to some uncertainty in the fundings for the new-technology sectors especially when interest rates started to rise precipitously in late 2021/early 2022.

As barriers to entry in the dominant sectors like agriculture and tourism sectors are relatively low, wages in these industries remain lower compared to other sectors coupled with low productivity. This has certainly deterred some degree holders to seek employment in the agriculture and tourism sectors, which typically do not require a high level of education.

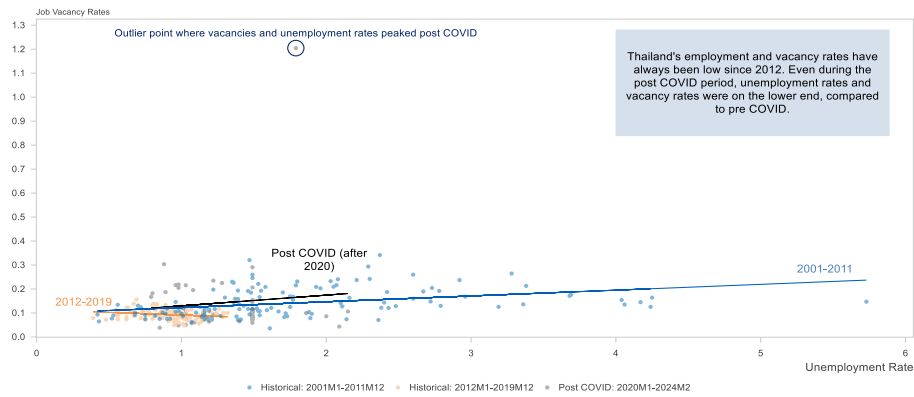
As a consequence, this has exacerbated the challenges of supply-demand mismatches in the Thai labour market and is likely to push those seeking higher-skilled jobs overseas while the recovery of the major sectors in the Thai economy will likely be more measured, resulting in slower wage growth. This development then impacts the strength of recovery in the private consumption and GDP growth at large. Diversification strategies such as promoting the exports sector such as processed food and advanced manufacturing industries and jobs with higher pay/value added can attract local talents

¹ https://www.bot.or.th/content/dam/bot/documents/en/our-roles/monetary-policy/mpc-publication/monetary-policy-report/MPR_2022_Q1.pdf

to find employment onshore and restimulate the economy. Meanwhile, improvements in the agriculture outputs and productivity, for example by employing recent crops-related technology such as adoption of drone and mechanisation could also improve yields and raise wages in the agriculture industry.

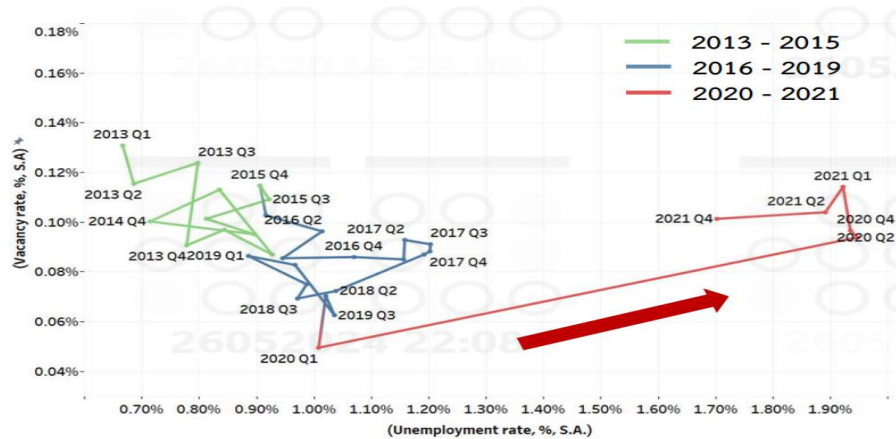
Thailand Beveridge Curve

Source: Macrobond, UOB Global Economics & Markets Research



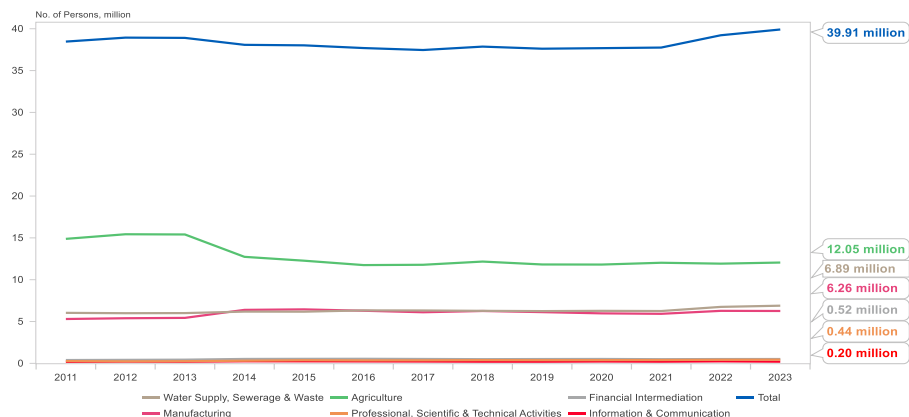
Thailand Beveridge Curve as estimated by the BOT

Source: Labour force survey by the National Statistical Office of Thailand and Bank of Thailand



Thailand employment numbers since 2011

Source: Macrobond, UOB Global Economics & Markets Research



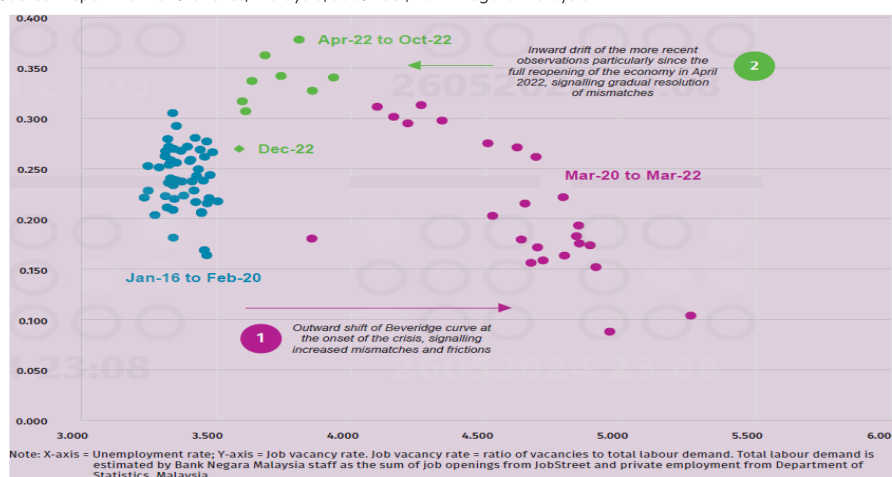
Malaysia: Reduction in mismatches but strategies for higher wage growth are needed

One very comprehensive Bank Negara Malaysia (BNM) study² on recent dynamics in Malaysia's labour market reveals that there is limited evidence that suggests labour market is tight, i.e. there is no surge in vacancy rates in the post-pandemic years while unemployment rate has remained above its pre-pandemic average (e.g. 4Q19 unemployment rate was at 3.2%, increased to a peak of 5.1% in 2Q20, and stabilized to around 3.6% in 4Q22). While Malaysia's vacancy data is lacking pre COVID, our estimate is consistent with BNM's study that Malaysia's unemployment rates have risen post COVID, accompanied by lower vacancy rates. In other words, Malaysia is experiencing a loose labour market. The income growth of the service, manufacturing and wholesale & retail trade industries remains low (less than 2.5%) post COVID except for employees in the field of professional, scientific & technical activities that experienced a spike in income growth in 2022. Despite a more sluggish wage growth as mismatches improved, employment growth figures have started to recover since the pandemic. The measured wage growth suggests that key industries in Malaysia, especially industries that demand skilled expertise and high value-added skills, should do more by raising wages to attract skilled labour.

Nevertheless, mismatches in skilled labor force remains and will continue to be a challenge as newer and advanced sectors expand in Malaysia in line with the New Industrial Masterplan 2030. Efforts are underway for industry collaborations with high-level education institutions to churn out more graduates educated and skilled in the relevant sectors. In the lower skilled segment, the challenges include uplifting productivity, skills and incomes for this group. This is difficult when foreign worker dependency remains high while informal workers comprise ~24% of the labor force

BNM's estimate of Malaysia Beveridge Curve

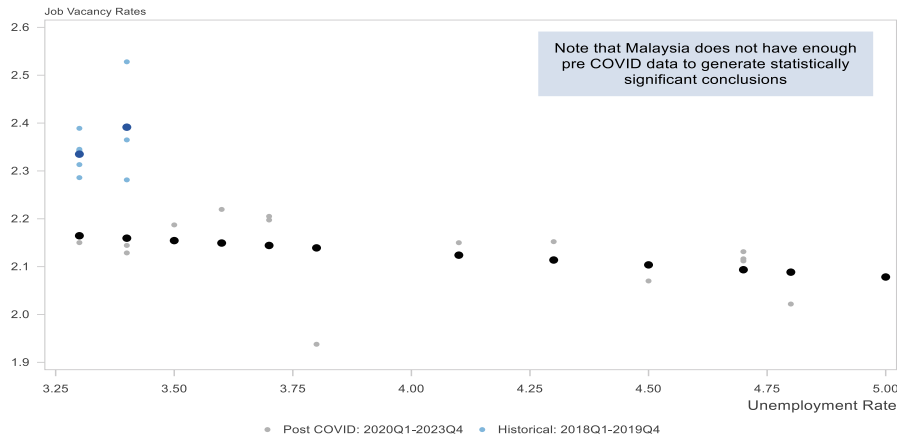
Source: Department of Statistics, Malaysia, JobStreet, Bank Negara Malaysia



² https://www.bnm.gov.my/documents/20124/10150285/emr2022_en_box2.pdf

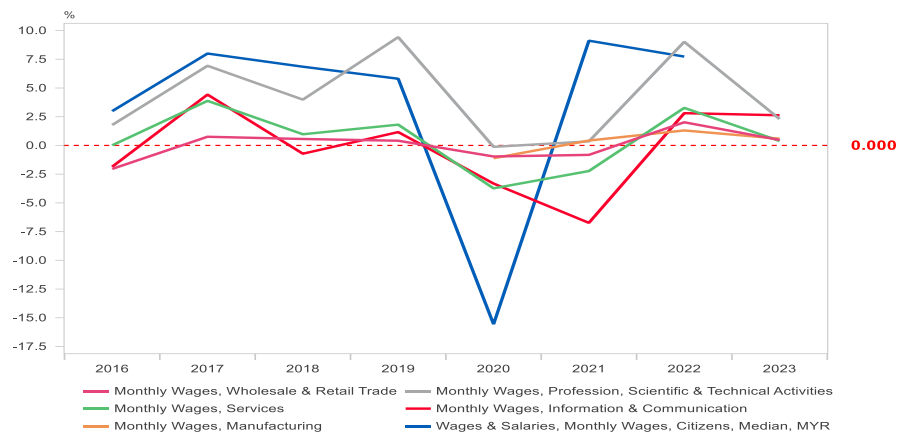
Malaysia Beveridge Curve

Source: Macrobond, UOB Global Economics & Markets Research



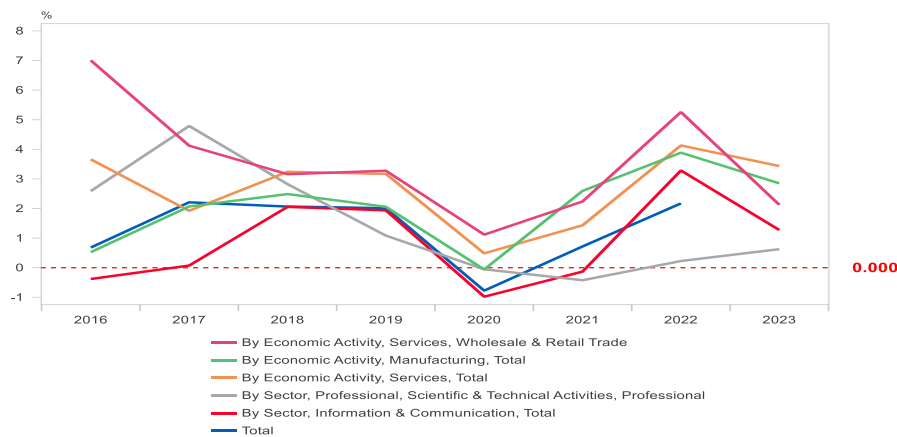
Malaysia Income Growth (YoY) since 2016

Source: Macrobond, UOB Global Economics & Markets Research



Malaysia Employment Growth (YoY) Since 2016

Source: Macrobond, UOB Global Economics & Markets Research



Indonesia: Large informal sector suggests internal matching is at play, wage growth remains limited

Indonesia Statistics recorded that around 53% of workers in Indonesia have incompatible backgrounds with their jobs. This shows that the education curriculum in Indonesia needs to be synchronised with industry needs to minimise jobs mismatches. Based on the IndOTaSk (Indonesia's Occupational Tasks and Skills) report, there are 51 high-demand occupations in Indonesia. The government issued a pre-employment card programme to increase the competence of the workforce through training, aiming for workers to occupy the Critical Occupation List (OCL) defined by the Indonesian government with suitable skills for their job. In addition, the Indonesian government also issued Presidential Regulation Number 68 of 2022 to ensure that vocational graduates have appropriate skills to meet industry demand through curriculum revitalisation and link and match programmes between educational institutions and industry.

Lack of vacancy data limits further and deeper understanding of jobs mismatches in Indonesia via Beveridge curve analysis. Anecdotal and available statistics, however, suggest Indonesia's workers income growth in the Information & Communication and Financial & Insurance sector shows some potentials for higher return on education in these areas, i.e. higher wages as the economy is demanding more talents in these industries. Although, similar to other regional economies, these sectors are starting to face a downturn since 2023.

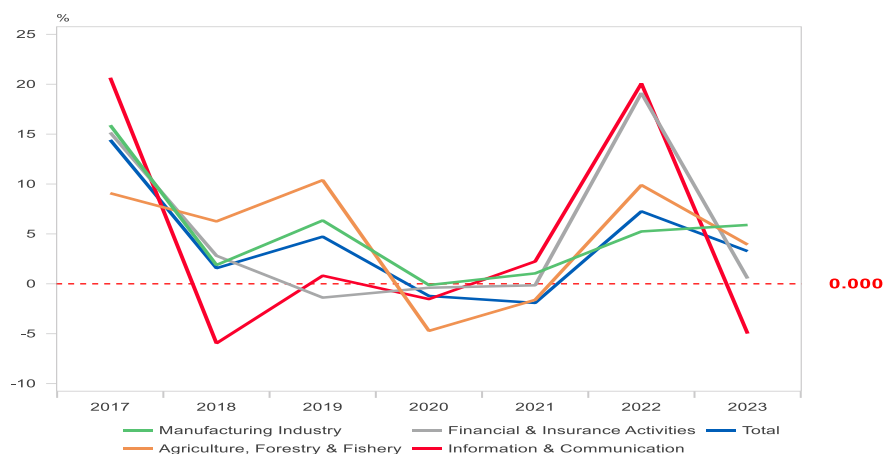
Employment in the accommodation sector grew faster after COVID and became the fourth largest contributor to employment (7.7% share of total employment) after the agriculture, trade, and manufacturing sectors. Meanwhile, employment growth in the manufacturing sector since the beginning of nickel down-streaming in 2021 is showing a downward trend due to the mismatch of high school curriculum which is considered incompatible with the needs of the manufacturing industry, especially in the base metal processing industry.

During the COVID period, workers in Indonesia migrated from the formal to the informal sector as evidenced by the spike in the agriculture sector in 2020. In 2023, the number of workers in the agriculture sector started to moderate, which was mainly due to the shift toward the accommodation sector as tourism activities recovered faster after the pandemic.

As the country progresses into a higher middle-income tier, data tracking for vacancy rates in the progressively formalized sectors of the economy is needed such that more targeted economic and structural policies can be introduced to increase not only workers' welfare, but also to bring about higher and more quality economic growth.

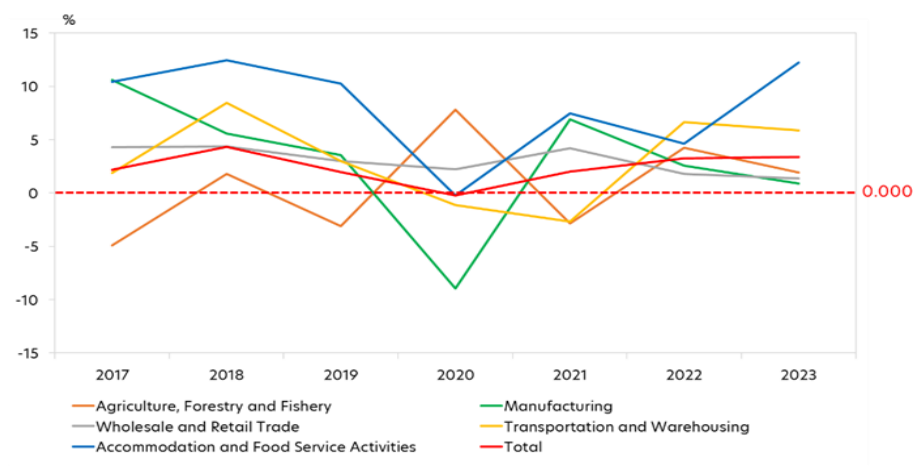
Indonesia Income Growth (YoY) since 2017

Source: Macrobond, UOB Global Economics & Markets Research



Indonesia Employment Growth Growth (YoY) since 2017

Source: Macrobond, UOB Global Economics & Markets Research



In conclusion...

In essence, there are nuances in the degree of skills' mismatches within the larger ASEAN-4 economies. For Singapore, a surge in tech-related labour demand and fall in non-resident employment may have led to an increase in matching inefficiency. Thailand's mismatches seem to be low but as this dwells on relatively low wages sectors, structural transformation to attract more higher value-added sectors that can cater more for its higher skilled workers are called for to sustain growth in its economy. Meanwhile, for Malaysia, studies found notable reduction in mismatches but strategies for higher wage growth in higher value-added skills are called for. Indonesia lacks job vacancy data but its large informal sector suggests that internal matching is relatively efficient. However, Indonesia's wage growth remains low and transformations are needed to attract investment in higher value-added industries.

The silver lining is that proactive and contextual government policies are needed to reduce the extent of mismatches and streamline the labour market more effectively. Finally, consistent monitoring and having more comprehensive labour market data will undoubtedly hasten up efforts to create a more dynamic and resilient labour force in our region.

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